

ABSTRACT

A method for designing an elliptical structure with an outline of an approximate elliptic curve, which is generated by connecting circular segments to one another, and an elliptical structure created on said method. A first fixed point is established outside the elliptical structure; from the first fixed point, a straight line segment is drawn to the farthest end point of the minor axis through the origin; a first circular segment is drawn from said farthest end point of the minor axis with the use of the first fixed point as the center and the first straight line segment having the same length as that of said straight line segment as the radius, through an arbitrary angle set at said first fixed point; a second fixed point is established on said first straight line segment; a second circular segment following said first circular segment is drawn with the use of the second fixed point as the center and the second straight line segment as the radius, through an arbitrary angle set at said second fixed point; this step is repeated as required; an n th circular segment following $(n - 1)$ th circular segment and ranging from the finish end of the $(n - 1)$ th circular segment to the major axis is drawn with the use of the intersecting point of $(n - 1)$ th straight line segment and the major axis as the center, and a part of the $(n - 1)$ th straight line segment as the radius; and these steps are used to draw a part of the outline in each of the other quadrants for drawing the entire outline.